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10/824,054	04/14/2004	Eric Lawrence Barsness	ROC920030052US1	6100

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IBM CORPORATION
ROCHESTER IP LAW DEPT. 917
3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2161

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rociplaw@us.ibm.com

Office Action Summary	Application No. 10/824,054	Applicant(s) BARSNESS ET AL.	
	Examiner CINDY NGUYEN	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 23-26 and 28-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9, 23-26, 28-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is response to amendment filed 02/18/2010.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-9, 23-26 and 28-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Clarke, JR. et al. (US 20040221038, hereafter Clarke).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it

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constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 6, Clarke discloses: A computer implemented method for managing access to the computer resources, the method comprising:

(a) defining a respective financial valuation of each of a plurality of work items to be processed by one or more data processing systems (**i.e., financial data such as generally available interest rates, contractor labor rates, cost of public computer capacity, price of services to be bought from a dealer, price of on-demand business services...see paragraph 0044, Clarke**);

(b) comparing the respective financial valuation of each respective said work item to a respective cost of accessing additional computer resources necessary to process the work item in a current time period, (**i.e., estimated values, may perform algorithmic calculations, and may request additional data from one of the preceding sources, or from additional external sources...determine and specifying the changes to be made, specifying an effective time period during which changes should be in effect...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications (e.g., addition or removal**

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of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties ...see paragraph 0055, lines 3+ ; 0063; 0068 Clarke) said additional computer resources being external to said one or more data processing systems **(i.e., additional resource information such as IT data may include data representative of IT resources external to the corporate environment ...see paragraph 0043 , Clarke); and**

(c) with respect to each said work item for which the respective financial valuation of each the work item exceeds the respective cost of accessing additional computer resources necessary to process the work item in the current time period, dynamically accessing additional computer resources necessary to process the work item in the current time period **(i.e., if the alternate values indicate a higher value/exceeds the respective cost may be obtained, then the decision is made to alter the environment..., ...see paragraphs 0055, lines 3+; 0056, lines 4+ , Clarke);**

(d) with respect to each said work item for which the respective financial valuation of the work item does not exceed the respective cost of accessing additional computer resources necessary to process the work item in the current time period, deferring processing of the work item to a subsequent time period **(i.e., determined that no modification of the environment is advisable, the method recommences at step 310. If a modification is indicated in step 340, the change is effected...see paragraphs 0058; for example, if an application is deemed to be causing congestion on the database, it may be advantageous to reduce its priority correspond to deferring processing of the work item to a subsequent time period , see 0065, lines 27+, Clarke); and**

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(e) repeating said (b) through (d) in one or more subsequent time periods with respect to each said work item deferred by said (d) until each said work item has been processed **(i.e., reexamined to see if such changes would be advisable....see paragraphs 0065, lines 27+; 0068, lines 5+, Clarke);**

Regarding claim 23, Thompson discloses A method of providing fee-based processing for programs in a processor system, whereby fees are based on utilization of computer resources for completing processing a program, the processor system including at least one processor (see paragraph 0029); a memory coupled to the at least one processor, and a scheduling manager residing in the memory (see paragraph 0029, lines 6), the method comprising the steps of:

(a) defining a respective financial valuation of each of a plurality of programs to be processed **(i.e., financial data such as generally available interest rates, contractor labor rates, cost of public computer capacity, price of services to be bought from a dealer, price of on-demand business services....see paragraph 0044, Clarke);**

(b) comparing the respective financial valuation of each respective said program to a respective projected fee for utilization of computer resources to process said program in a current time , **(i.e., estimated values, may perform algorithmic calculations, and may request additional data from one of the preceding sources, or from additional external sources... determine and specifying the changes to be made, specifying an effective time period during which changes should be in effect**

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...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications (e.g., addition or removal of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties ...see paragraph 0055, lines 3+ , Clarke) said additional computer resources being external to said one or more data processing systems **(i.e., additional resource information such as IT data may include data representative of IT resources external to the corporate environment ...see paragraph 0043 , 0063; 0068 Clarke);**

(c) with respect to each said program for which the respective valuation of the program exceeds the respective projected fee for utilization of computer resources to process the program in the current time period, dynamically accessing computer resources to be applied to a process the program in the current time period **(i.e., if the alternate values indicate a higher value may be obtained, then the decision is made to alter the environment..., ...see paragraphs 0055, lines 3+; 0056, lines 4+ , Clarke);**

(d) with respect to each said program for which the respective financial valuation of the program does not exceed the respective projected fee for utilization of computer resources to process the program in the current time period, deferring processing of the program to a subsequent time period **(i.e., determined that no modification of the environment is advisable, the method recommences at step 310. If a modification is indicated in step 340, the change is effected...see paragraphs 0058; for example, if an application is deemed to be causing congestion on the database, it may be**

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advantageous to reduce its priority correspond to deferring processing of the work item to a subsequent time period , see 0065, lines 27+, Clarke); and

(e) repeating said (b) through (d) in one or more subsequent time periods with respect to each said program deferred by said (d) until each said program has been processed **(i.e., reexamined to see if such changes would be advisable....see paragraphs 0065, lines 27+; 0068, lines 5+, Clarke); and**

(f) assessing a fee for the dynamically accessed computer resources to be used (i.e., financial data 220, see paragraph 0041, Clarke).

Regarding claim 29, Clarke discloses: An apparatus and a networks environment comprising:

at least one processor (see paragraph 0050, lines 6);

a memory coupled to the at least one processor (see paragraph 0050, lines 6); and

a scheduling manager residing in the memory and executable on the at least one processor, the scheduling manager dynamically managing access of each of a plurality of work items to additional computer resources external to said data processing apparatus for processing the respective work item, each said work item being a respective item of work performable by a data processing system and having a respective financial valuation (see paragraphs 0009; 0049; 0050; 0054, Clarke);

wherein said scheduling manager, in each of a plurality of time periods, compares the respective financial valuation of each unprocessed work item to a respective cost of accessing said additional computer resources to process the work item in the respective financial time period, and with respect to each said work item for which the respective

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financial valuation exceeds the respective cost of accessing the additional computer resources to process the work item in the respective time period, dynamically accesses the additional computer resources to process the work item in the respective time period **(i.e., estimated values, may perform algorithmic calculations, and ay request additional data from one of the preceding sources, or from additional external sources...determine and specifying the changes to be made, specifying an effective time period during which changes should be in effect...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications (e.g., addition or removal of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties ...see paragraph 0055, lines 3+ ; 0063; 0068 Clarke); and**

with respect to each said work item for which the respective valuation does not exceed the respective cost of accessing the additional computer resources to process the work item in the respective time period, defers processing of the work time to a subsequent time period **(i.e., determined that no modification of the environment is advisable, the method recommences at step 310. If a modification is indicated in step 340, the change is effected...see paragraphs 0058; for example, if an application is deemed to be causing congestion on the database, it may be advantageous to reduce its priority correspond to deferring processing of the work item to a subsequent time period , see 0065, lines 27+, Clarke).**

Regarding claim 33, A program product comprising:

a scheduling manager embodied as a plurality of computer-executable instructions recorded on computer-readable storage medium, wherein said scheduling manager, when executed by a computer system, causes the computer system to (see paragraphs 0009; 0049; 0050; 0054, Clarke);

(a) compare a respective defined financial valuation of each of a plurality of work items to be processed by the computer system to a respective cost of accessing additional computer resources necessary to process the work item in a current time period, said additional computer resources being external to said computer system (**i.e., estimated values, may perform algorithmic calculations, and ay request additional data from one of the preceding sources, or from additional external sources... determine and specifying the changes to be made, specifying an effective time period during which changes should be in effect ...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications (e.g., addition or removal of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties..., if the alternate values indicate a higher value may be obtained, then the decision is made to alter the environment..., ...see paragraphs 0055, lines 3+; 0056, lines 4+ , Clarke**);

(b) with respect to each said work item for which the respective financial valuation of the work item exceeds the respective cost of accessing additional computer resources necessary to process the work item in the current time period, dynamically

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accesses additional computer resources necessary to process the work item in the current time period , **(i.e., estimated values, may perform algorithmic calculations, and ay request additional data from one of the preceding sources, or from additional external sources...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications (e.g., addition or removal of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties..., if the alternate values indicate a higher value may be obtained, then the decision is made to alter the environment..., ...see paragraphs 0055, lines 3+; 0056, lines 4+; 0063; 0068 , Clarke);**

(c) with respect to each said work item for which the respective financial valuation of the work item does not exceed the respective cost of accessing additional computer resources necessary to process the work item in the current time period, defers processing of the work item to a subsequent time period **(i.e., determined that no modification of the environment is advisable, the method recommences at step 310. If a modification is indicated in step 340, the change is effected...see paragraphs 0058; for example, if an application is deemed to be causing congestion on the database, it may be advantageous to reduce its priority correspond to deferring processing of the work item to a subsequent time period , see 0065, lines 27+, Clarke);**

and

(d) repeats said (a) through (c) in one or more subsequent time periods with respect to each said work item deferred by said (c) until each said work item has been processed **(i.e., reexamined to see if such changes would be advisable....see paragraphs 0065, lines 27+; 0068, lines 5+, Clarke).**

Regarding claim 37, all the limitation of this claim has been noted in rejection of claim 29, In addition, Clarke discloses: a grid of computing resources (see paragraph 0023);

a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (i.e., network management module 151 communicate with other computing systems 120, 130, 140, 150, 160, fig. 1, Clarke);

one or more computer systems of a customer coupled to the request manager; the one computer system comprising one or more processors (see paragraph 0038, Clarke).

With respect to claim 41, it is similar as claim 6 and 23 and is similarly rejected.

Regarding claims 7, 21, 24, 30, 34 and 38, all the limitations of these claims have been noted in the rejection of claims 6, 20 and 23, 29 and 37 above, respectively. In addition, Clarke discloses: wherein the scheduling manager applies a valuation heuristic to each work item **(i.e., estimated values, may perform algorithmic calculations, and may request additional data from one of the preceding sources, or from additional external sources...see paragraph 0046; further determined based on potential changes to the distributed computing workload (e.g., addition or deletion of particular application jobs at particular locations), configuration modifications**

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(e.g., addition or removal of resources from a grid) and the resultant economic consequences in increased revenue, decreased cost as financial valuation, and potential SLA penalties..., if the alternate values indicate a higher value may be obtained, then the decision/applied is made to alter the environment..., ...see paragraphs 0055, lines 3+; 0056, lines 4+ , Clarke);

Regarding claims 8, 22 and 25, 31, 35, 39 and 42, all the limitations of these claims have been noted in the rejection of claims 6, 20 and 24, 29, 33, 37 and 41 above, respectively. In addition, Clarke discloses: further comprising applying a priority algorithm for preventing starvation of computer resources to those work items which have been delayed, whereby the processing of all the work items in a program is completed **(i.e., the priority may be determined via algorithm... and make decision change that impact to valued customers...paragraph 0068, lines 8+, Clarke).**

Claims 9, 32, 36 and 40. In addition, Clarke discloses: comprising having the priority algorithm increase respective valuations of delayed work items so as to complete processing of each of the work items prior to or at a cut off processing date of the work item **(i.e., the priority may be determined via algorithm...and make decision change that impact to valued customers...paragraph 0068, lines 8+; 0064, Clarke).**

Regarding claim 26, all the limitations of this claim have been noted in the rejection of claim 25 above. In addition, Clarke discloses: wherein the dynamic

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determination is based on different attributes of the one or more work items forming at least part of a program (**i.e., attributes of configuration, resources, performance, utilization, hardware and software ...are determined from these systems...see paragraph 0039, Clarke).**

Regarding claim 28, all the limitations of this claim have been noted in the rejection of claim 6 above. In addition, Clarke discloses: wherein said method is used in a networked environment including a grid of computing resources (see paragraph 0023), and a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (i.e., network management module 151 communicate with other computing systems 120, 130, 140, 150, 160, fig. 1, Clarke);

wherein said additional computer resources comprise computing resources of said grid of computing resources wherein one or more computer systems of a customer is coupled to the request manager and include one or more processors (see paragraph 0038, Clarke);

a memory coupled to at least the one processor (paragraph 0050); and,
a scheduling manager residing in the memory and executable by the at least the one processor (see paragraph 009; 0049, Clarke).

Regarding claim 43, all the limitations of this claim have been noted in the rejection of claim 41 above. In addition, Clarke discloses: wherein said method is used in a networked environment including a grid of computing resources (paragraph 0043, Clarke), and a request manager of the grid to receive requests of one or more customers

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for utilization of computing resources of the grid (see paragraph 0049, 0050, Clarke); wherein said additional computer resources comprise computing resources of said grid of computing resources (see paragraphs 0043, Clarke).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to CINDY NGUYEN whose telephone number is (571)272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. N./
Examiner, Art Unit 2161

/A Oberley/

Primary Examiner, Art Unit 2100